

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:



(currently amended) A transmitter assembly comprising:

a pre-distortion type linearizer to cancel a distortion component caused in a transmission signal and a correction data component; and

first storage means for preliminarily storing said correction data component;

wherein said first storage means manages said correction data component as a table per transmission level and

wherein said transmission level is a sum of an alternating current voltage value corresponding to an instantaneous power of ~~a~~ the transmission signal and a direct current voltage value corresponding to a part of the power of ~~the~~ a transmission output signal of the transmitter assembly.

2. (canceled).

2. ~~2.~~ (currently amended): The transmitter assembly as set forth in claim 1, which further comprises:

second storage means having a plurality of tables of said correction data component per transmission frequency and environmental temperature; and

means for updating the content of said first storage means with the corresponding table of said second storage means when at least one of the transmission frequency and the environmental temperature is varied.

5 ~~A.~~ ^{previously presented} (~~currently amended~~): A distortion compensation method for a transmitter, comprising:

reading out a value corresponding to a transmission level from a first storage means preliminarily storing a correction data component; and

inputting the read out value to a pre-distortion type linearizer;

wherein said first storage means manages said correction data component in a form of a table per transmission level; and

wherein said transmission level is a sum of an alternating current voltage value corresponding to an instantaneous power of a transmission signal and a direct current voltage corresponding to a part of the power of transmission output signal.

5. (canceled).

6. (previously presented): The distortion compensation method as set forth in claim 5 ~~A.~~, wherein a storage content of said first storage means is updated with a corresponding table in said second storage means storing a plurality of tables storing said correction data component per transmission frequency and environmental temperature when at least one of said transmission frequency and environmental temperature is varied.

3 ~~7~~. (currently amended): The transmitter assembly as set forth in claim 1, wherein an address corresponding to said transmission level and said instantaneous power, and ~~a~~ said correction data component corresponding to said address are stored in said first storage means.

8. (canceled).

4 ~~9~~. (previously presented): The transmitter assembly as set forth in claim 1, wherein said correction data component consists of a predetermined amplitude value and a predetermined phase value of the transmission signal.

7 ~~10~~. (currently amended): The distortion compensation method as set forth in claim ⁵~~4~~, wherein ~~the~~ an address corresponding to the transmission level and the instantaneous power, and the correction data component corresponding to said address are stored in said first storage means.

11. (canceled).

8 ~~12~~. (previously presented): The distortion compensation method as set forth in claim ⁵~~4~~, wherein said correction data component consists of a predetermined amplitude value and a predetermined phase value of the transmission signal.

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9 ~~13~~.

previously presented
(~~currently amended~~):

A transmitter assembly comprising:

a pre-distortion type linearizer to cancel a distortion component caused in a transmission signal and a correction data component;

transmission signal generating means generating a baseband signal of an I signal and a Q signal;

transmission means modulating and amplifying said baseband signal into an RF signal;

said pre-distortion type linearizer being provided between an output of said transmission signal generating means and an input of said transmission means;

directional coupling means dividing said RF signal;

power detecting means detecting said RF signal and outputting a transmission level to address generating means;

power calculating means calculating an instantaneous power of said baseband signal to output to said address generating means;

said address generating means detecting an address of data to be output by a first storage means from said transmission level and said instantaneous power of said baseband signal; and

said first storage means for preliminarily storing said correction data component.

10 ~~14~~. (previously presented): The transmitter assembly as set forth in claim ~~13~~⁹,

wherein said first storage means manages correction data as a table per said transmission level.

13 ~~13~~ (currently amended): The transmitter assembly as set forth in claim ~~13~~⁹, which further comprises:

second storage means having a plurality of tables of said correction data component per transmission frequency and environmental temperature; and

means for updating the content of said first storage means with the corresponding table of said second storage means when at least one of the transmission frequency and the environmental temperature is varied.

11 ~~16~~ (currently amended): The transmitter assembly as set forth in claim ~~14~~¹⁰, wherein ~~an~~ the address corresponding to said transmission level and said instantaneous power, and a correction data component corresponding to said address are stored in said first storage means.

12 ~~17~~ (currently amended): The transmitter assembly as set forth in claim ~~14~~¹⁰, wherein said transmission level is a sum of an alternating current voltage value corresponding to ~~an~~ the instantaneous power of a ~~the~~ transmission signal and a direct current voltage value corresponding to a part of the power of a transmission output signal.

14 ~~18~~ (previously presented): The transmitter assembly as set forth in claim ~~13~~⁹, wherein said correction data component consists of a predetermined amplitude value and a predetermined phase value of the transmission signal.

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15 19. (currently amended): A distortion compensation method for a transmitter, comprising:

providing a pre-distortion type linearizer between an output of a transmission signal generating means and an input of a transmission means;

dividing an RF signal by a directional coupling means;

detecting said RF signal and outputting a transmission level to address generating means by power detecting means;

calculating an instantaneous power of a ~~base-band~~baseband signal to output to said address generating means by power calculating means;

determining an address of data to be output by a first storage means from said transmission level and said instantaneous power of said ~~base-band~~baseband signal by said address generating means reading out a value corresponding to said transmission level from said first storage means preliminarily storing a correction data component; and

inputting the read out value of the correction data component to said pre-distortion type linearizer.

16 20. (previously presented): The distortion compensation method as set forth in claim 15 19, wherein said first storage means manages the correction data component in a form of a table per said transmission level.

19 21. (previously presented): The distortion compensation method as set forth in claim 15 19, wherein a storage content of said first storage means is updated with a corresponding table in

a second storage means storing a plurality of tables storing said correction data component per transmission frequency and environmental temperature when at least one of said transmission frequency and environmental temperature is varied.

17 ~~22~~. (currently amended): The distortion compensation method as set forth in claim
16 ~~20~~, wherein the address corresponding to the transmission level and the instantaneous power, and
the correction data component corresponding to said address are stored in said first storage
means.

18 ~~23~~. (currently amended): The distortion compensation method as set forth in claim
16 ~~20~~, wherein said transmission level is a sum of an alternating current voltage value
corresponding to ~~an~~ the instantaneous power of said transmission signal and a direct current
voltage value corresponding to a part of the power of a transmission output signal.

20 ~~24~~. (previously presented): The distortion compensation method as set forth in claim
15 ~~19~~, wherein said correction data component consists of a predetermined amplitude value and a
predetermined phase value of the transmission signal.